

IN THE CLAIMS:

Cancelled claims:

Please cancel claims 2, 27, 55, 94 and 95 without prejudice or disclaimer.

Amended claims:

Please amend claims 1, 84 and 96 as follows:

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1. (Amended) Isolated mammalian muscle-derived progenitor cells expressing desmin as a cell surface protein and having long-term survivability when introduced into an autologous or allogeneic mammalian recipient host, wherein long term survivability is determined by viability or proliferation of the cells as muscle tissue cells at or near a site of introduction for greater than or equal to about two weeks following subcutaneous injection into (i) a severe combined immune deficient (SCID) mouse model system or (ii) the recipient host.

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84. (Amended) A method of isolating muscle-derived progenitor cells from a mammal, comprising:

- a. enzymatically digesting muscle tissue to obtain a suspension of cells;
- b. plating the cell suspension in a collagen coated container;
- c. removing the suspended, non-adherent cells;
- d. re-plating the cells of (c) in a second collagen coated container;
- e. repeating steps (c) and (d) thereby enriching for viable, slowly adhering cells in the container, wherein a last plating comprises the viable, slowly adhering cells and virtually no fibroblast cells; and
- f. isolating the viable, slowly adhering cells present after the last plating.

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96. (Amended) The cells according to claim 1 or claim 104, wherein the cells co-express at least one cell marker selected from the group consisting of CD34, Bcl-2, Sca-1 and Flk-1, and do not express CD45 and c-Kit cell markers.

New claims:

Please add claims 100-106 as follows:

100. (New) The method according to claim 84, wherein the muscle tissue of (a) is skeletal muscle.

101. (New) The method according to claim 84, wherein steps (c) and (d) are repeated at least five times.

~~102.~~ (New) A method of augmenting or bulking muscle tissue in a mammalian host, comprising: administering a physiologically acceptable composition comprising desmin-expressing autologous or allogeneic muscle derived progenitor cells, characterized in that the cells survive or proliferate as muscle tissue cells in and around a site of administration for at least about two weeks following injection into the host, wherein the cells are administered to the host in an amount sufficient to augment or bulk the muscle tissue.

A^u ~~103.~~ (New) A method of treating weakness or dysfunction in muscle tissue in a mammalian host, comprising: administering a physiologically acceptable composition comprising desmin-expressing autologous or allogeneic muscle derived progenitor cells, said cells characterized in that the cells survive or proliferate as muscle tissue cells in and around a site of administration for at least about two weeks following injection into the host, wherein the cells are administered to the host in an amount sufficient to treat the muscle tissue weakness or dysfunction.

~~104.~~ (New) An isolated population of desmin-expressing mammalian muscle-derived progenitor cells having functional long-term survivability when introduced into a mammalian recipient host, wherein functional long term survivability is determined by viability or proliferation and function of the cells as muscle tissue cells for greater than or equal to two weeks at or near a site of introduction following subcutaneous injection into a severe combined immune deficient (SCID) mouse model system or into the recipient host.

105. (New) A clonal population of cells further isolated from the cells according to claim 1 or claim 104.